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(54) TRACKING SYSTEM AND METHOD FOR USE IN SURVEYING AMUSEMENT PARK **EQUIPMENT**

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(57)**ABSTRACT**

A dynamic signal to noise ratio tracking system enables detection and tracking of amusement park equipment within the field of view of the tracking system. The tracking system may include an emitter configured to emit electromagnetic radiation within an area, a detector configured to detect electromagnetic radiation reflected back from vehicles within the area, and a control unit configured to evaluate signals from the detector to survey the amusement park equipment to determine whether the equipment has degraded or shifted.

